

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) Internati nal Patent Classification 7: WO 00/06597 (11) International Publication Number: **A3** G01N 33/566 (43) Internati nai Publicati n Date: 10 February 2000 (10.02.00) PCT/US99/17425 (21) International Application Number:

30 July 1999 (30.07.99) (22) International Filing Date:

(30) Priority Data: US 60/094,879 31 July 1998 (31.07.98) US 30 October 1998 (30.10.98) 60/106,300 4 December 1998 (04.12.98) US 60/110,906 26 February 1999 (26.02.99) 60/121,851

(71) Applicant (for all designated States except US): ARENA PHARMACEUTICALS, INC. [US/US]; 6166 Nancy Ridge Drive, San Diego, CA 92121 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BEHAN, Dominic, P. [GB/US]; 11472 Roxboro Court, San Diego, CA (US). CHALMERS, Derek, T. [GB/US]; 347 Longden Lane, Solana Beach, CA 92075 (US). LIAW, Chen [US/US]; 7668 Salix Place, San Diego, CA 92129 (US). LIN, I-Lin [-/US]; 8291-7 Gold Coast Drive, San Diego, CA 92126 (US). LOWITZ, Kevin [US/US]; Apartment C, 8031 Caminito de Pizza, San Diego, CA 92108 (US). CHEN, Ruoping [CN/US]; 5296 Timber Branch Way, San Diego, CA 92130 (74) Agents: MILLER, Suzanne, E. et al.; Woodcock Washburn Kurtz Mackiewicz & Norris LLP, 46th floor, One Liberty Place, Philadelphia, PA 19103 (US).

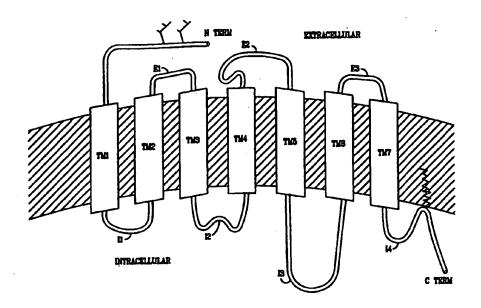
(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, IP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

With international search report.

(88) Date of publication of the international search report: 18 May 2000 (18.05.00)

(54) Title: ENDOGENOUS CONSTITUTIVELY ACTIVATED G PROTEIN-COUPLED ORPHAN RECEPTORS



(57) Abstract

Disclosed herein are techniques for directly identifying candidate compounds as agonists, partial agonists and/or, most preferably. inverse agonists, to endogenous, constitutively activated orphan G protein-coupled receptors. Such directly identified compounds can be utilized, most preferably, in pharmaceutical compositions.